Ecological Services Perspectives & Role

What could we all use to do conservation delivery more effectively and efficiently?

How can we better share the collection of information, technologies, and expertise we already have?

How can the LCC help answer these questions and identify/fill significant gaps?

Ecological Services

Endangered Species

- candidate species assessment and conservation
- listing
- recovery
- consultation with federal agencies/applicants
- permits (scientific & incidental take – HCP’s)
- grants to States

Ecological Services

Conservation Planning Assistance

Focus on habitat conservation with State wildlife agencies under Fish & Wildlife Coordination Act

Environmental Contaminants

Ecotoxicology

Environmental quality

Natural Resource Damage Assessments (NRDA)

Ecological Services

Partners for Fish and Wildlife

- Restoration of priority habitats on private lands

National Wetland Inventory

- Mapping
- Status & Trends

Coastal Program

What ES Really Does
"What We Bring to the Table"

- Risk Assessment & Risk Abatement
- Triage Biology – Urgency/Priority
- Conservation Biology – How Many & Where
- Establish Objectives - Species, Population, and Systems
- Adaptive Management – e.g., Recovery
- Diverse Geographic Scope – microhabitats to ecosystems; counties/watersheds to regions
- Threat Trends – track threats and shift priorities to focus on critical threat trends, including new, emerging threats (e.g. energy, pharmaceuticals, WNS, invasive species, climate change)

What ES Really Does
"What We Bring to the Table"

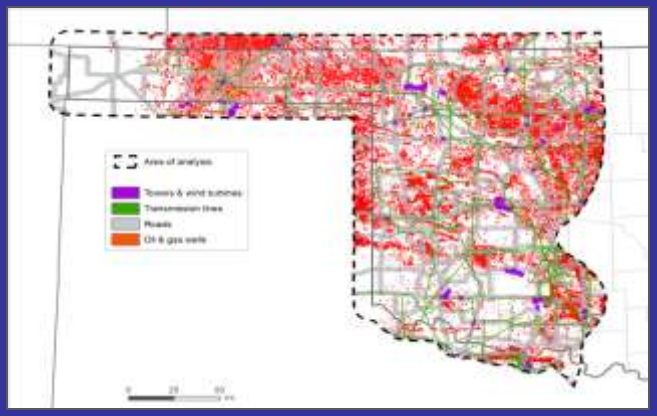
- Employ an array of techniques/measures to restore & protect habitats and species – e.g., captive propagation-reintroductions, HGM, fire, conservation genetics, ecotyping, ecological remediation
- Utilize a variety of conservation instruments e.g., Conservation & Mitigation Banks, Safe Harbor Agreements, HCP's, Farm Bill
- Vested in State Comprehensive Plans
- Interact with full spectrum of entities
- Collaborative Problem Solving/Negotiators
- Bring $ to partnerships e.g., PL, CPA, ESA, NRDA

Example – ES Capacities Ecosystem Restoration

- 9,000 ac. Longleaf pine restored/enhanced on private lands in East Texas
- Efforts by Arlington, TX ESFO part of a larger, range-wide “Longleaf Pine Task Force”

Example – ES Capacities Threat Assessment/Abatement

Multiple partners, including the Oklahoma ESFO, developed the Oklahoma Lesser Prairie-Chicken Spatial Planning Tool – a spatially explicit model designed to assist development planning by avoiding, minimizing, and mitigating negative effects of development on the Lesser-Prairie Chicken (an imperiled candidate species) in Oklahoma



Critical ES Needs from LCC's

Enhanced capabilities and access to expertise:

- determining the best places to work e.g., gap analysis
- optimal size, connectivity e.g., preserve design
- how much is enough, urgency e.g., PVA/PHVA
- predictive habitat and species distribution models
- prioritizing threats e.g., risk analysis models

Enhanced monitoring design and capabilities

- resources to conduct real monitoring

Critical ES Needs from LCC's

Enhanced decision making capabilities:

- Structured Decision Making – build capacity/expertise
- Compile/Link key databases/information for priority resource issues and build real-time Decision Support Systems available to all partners

Habitat and population restoration techniques

- Sharing techniques/successes
- Demo Sites, Field Days, Workshops

Role of LCC's

- Focus on science delivery
    - SHC
    - Climate Crisis
    - Landscapes
- Identify commonality of science needs and capacity
- Link key parts (e.g., priorities, objectives, and tasks) of different plans (e.g., State comprehensive plans, JV's, recovery plans, etc.)

Role of LCC's

- Enhanced monitoring design and capabilities
  - Compiling/sharing monitoring protocols e.g., USGS monitoring website
  - Assist with designing monitoring plans
  - Utilize existing monitoring capabilities/expertise
    e.g., NPS, FWCO, States
- Facilitate integration of resource priorities

Role of LCC's

- Facilitate/Build capacity to connect partners and conservation across the landscape (LCC)
    - Combine datasets, provide access, build decision support systems
    - Geo-referenced data with web-mapping (USGS)
    - Establish real-time communication (e.g. Wiki site)
    - Expand partnerships
- **Integrate, Integrate, Integrate**

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